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Afterwards a substance is formed rich in carbon and containing three times more hydrogen than if it consisted of carbon and water. From this it appears to him that the necessity of an excess of hydrogen in vegetation may be proved. The substance containing so much hydrogen is said to be a thick fluid, &c.

[To be continued.]

XIX.—*Account of a Specimen of the Oblong Sunfish,* Orthagoriscus Oblongus, *taken at Par in Cornwall, and preserved in the Museum of the Royal Institution of Cornwall at Truro.* By Jonathan Couch, F.L.S., M.R.G.S. of Cornwall.

Notwithstanding that the figures and description of the Oblong or Longer Sunfish, as published by Borlase, Montagu, Donovan and Mr. Yarrell, would seem sufficient to remove all doubt of the specific character of this fish, and the great difference between it and the more common species, *O. Mola*; yet even now this conclusion does not seem universally assented to. It is with great pleasure, therefore, that I am able, from examination of a specimen, to add my testimony to that of the above-named distinguished naturalists. The specimen had wandered into the lock of the new-made canal at a short distance west of Fowey; and being deemed extraordinary, though without a full knowledge of the interest attached to it, it was carefully skinned and preserved, to be presented to the Royal Cornwall Museum. The length is 22 inches; depth, measured on the round, from back to belly, $11\frac{1}{2}$; from snout to the eye, $2\frac{3}{4}$; to the origin of the pectoral fin, $8\frac{1}{2}$; length of this fin, $4\frac{1}{4}$; caudal fin $1\frac{1}{2}$ inch wide, or more properly, long; anal fin 6 inches—as I suppose is the dorsal, but the latter is a little injured. The number of fin rays is here given:

P. 15, D. 18, A. 17, C. 18.

The figure of this fish, which is here forwarded, is so little different from that given by Mr. Yarrell ('British Fishes,' vol. ii. p. 354.), as scarcely to require remark; I would therefore only point out, that in this skin there appears a plait bound over the upper lip, and that the rays of the dorsal and anal fins are bent into a curve at their termination; neither of which circumstances are marked in Mr. Yarrell's figure; probably be-

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Mr. Yarrell's figure of the Shorter Sunfish is taken from a young specimen, and therefore but inadequately represents that species in its mature growth. The many opportunities, however, which I have had of examining this fish, and sometimes of large size, will allow of no doubt of its being distinctly separate from its far more rare congener, the Oblong Sunfish. The fin rays will probably be found to differ in the different specimens of both these species; but together with the lengthened form of the body, and shape of the mouth, the different shape of the pectoral fin will be sufficient to prevent all further hesitation on the subject.

Polperro, September 1, 1840.

BIBLIOGRAPHICAL NOTICES.

Icones Fungorum, &c. Tomus 3. J. C. Corda. Pragæ, 1839.

We have already twice noticed this valuable work, which is contributing greatly to our knowledge of Fungi. Our especial object, however, in again adverting to it, is to direct attention to the confirmation it affords of Léveillé's new views of the structure and nature of Entophytous Fungi, of which an account is given in the 11th volume of the New Series of Annales des Sciences Naturelles. M. Corda's observations are perfectly independent of those of the French mycologist; and both the learned authors, whose discoveries were published in the same year, appear entitled almost equally to the credit attached to them, though M. Léveillé has followed out the subject more completely. Indeed, Corda's observations are confined to a single species. The facts made known are very important, and are scarcely second in interest to those which have been accumulated lately regarding the *Hymenomycetes*.

It is well known that various opinions have prevailed as to the nature of *Entophyta*, and that M. Unger has lately paid much attention to the subject, and has arrived at the conclusion satisfactory to himself, but not equally so to all mycologists, that they are mere exanthemata analogous to cutaneous eruptions in mammalia. M. Léveillé, however, not contented with this notion, has examined them still more recently, and has discovered that in those species in which the cuticle of the matrix is most easily removed, there is immediately beneath it a true mycelium, from which the fungus is ultimately developed: and Corda, who has given most beautiful figures, though he appears not to have paid particular attention to the more early stages of growth, has shown that this mycelium penetrates the cells and interstices which are beneath the sori. This we have ourselves observed in *Æcidium Euphorbiæ*, the only species we have at present examined. Léveillé has also shown that this structure prevails

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